



SHEET 1 of 6

FORM PTO - 1449 INFORMATION DISCLOSURE STATEMENT		ATTORNEY DOCKET NO.: VXM-001A APPLICANT(S): Vitaliano et al. SERIAL NO.: 10/661,465 FILING DATE: September 11, 2003 GROUP: 1647 1631
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U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
<i>RLS</i>	A1	4,367,066	01/04/83	Zellweger, S.	434	433	
	A2	4,999,842	3/12/91	Huang et al.	372	45	
	A3	5,287,377	02/15/94	Fukuzawa et al.	372	45	
	A4	5,613,140	03/18/97	Taira, K.	395	800	
	A5	5,671,437	09/23/97	Taira, K.	395	800	
	A6	5,838,436	11/17/98	Hotaling et al.	356	345	
	A7	5,940,193	08/17/99	Hotaling et al.	359	11	
	A8	6,437,413 B1	08/20/02	Yamaguchi et al.	257	421	
	A9	6,456,994 B1	09/24/02	Tucci, R.	706	52	
	A10	6,459,097 B1	10/01/02	Zagoskin, A.	257	31	
	A11	6,472,681 B1	10/29/02	Kane, B.	257	14	

FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)

OTHER ART, JOURNAL ARTICLES, ETC.

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)	
<i>RLS</i>	C1	Abe, E. (2001) "ESR on Shallow Donors in Ge," (PowerPoint Presentation)
<i>RLS</i>	C2	Barenco et al. (1996) "A short introduction to quantum computation," www.qubit.org/library/intros/comp/comp.html .
<i>RLS</i>	C3	Bayer, M. (August 8, 2002) "One at a time, please," <i>Nature</i> 418: 597-598.

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<i>ZM</i>	C4	Benjamin et al. (date unknown) "Towards Quantum Information Technology," www.qubit.org/library/intros/nano/nano.html
	C5	Blatt, R. (2001) "Delicate information," <i>Nature</i> 412: 773.
	C6	Borbat et al. (April 19, 2002) "Protein Structure Determination Using Long-Distance Constraints from Double-Quantum Coherence ESR: Study of T4 Lysozyme," <i>J. Am. Chem. Soc.</i> 124: 5304-5314.
	C7	Brown J. (2000) "Minds, Machines and the Multiverse (The Quest for the Quantum Computer)," Chapter 1, Simon & Schuster 2000
	C8	Cheetham et al. (1996) "Inhibition of hsc70-catalysed clathrin uncoating by Hsp11 proteins," <i>Biochem J.</i> 319: 103-108.
	C9	Claeysen et al. (November 18, 2002) "A Single Mutation in the 5-HT ₄ Receptor (5-HT ₄ -R D100(3.32)A) Generates a G _s -coupled Receptor Activated Exclusively by Synthetic Ligands (RASSL)," <i>Journal of Biological Chemistry</i> 278: 699-702
	C10	Craig et al. (2001) "β-Arrestin-mediated ADP-ribosylation Factor 6 Activation and β ₂ -Adrenergic Receptor Endocytosis," <i>Journal of Biological Chemistry</i> 276: 42509-42513
	C11	Coward et al. (1998) "Controlling signaling with a specifically designed G _i -coupled receptor," <i>Proc. Natl. Acad. Sci. USA</i> 95: 352-357
	C12	Crotzer, V. L. et al. (2001) "The Role and Regulation of Clathrin in T cell Receptor Internalization," (Abstract) www.midwconfimmunol.org/Midwinter01/posters/crotzer.html
	C13	Deutsch et al. (1998) "Quantum Computation," www.qubit.org/library/intros/PhysicsWorld/PhysicsWorld.html , Page 1 only.
	C14	De Martini et al. (October 24, 2002) "Experimental realization of the quantum universal NOT gate," <i>Nature</i> 419: 815-818
	C15	DiVincenzo, D. (1996) "Gates and Circuits: Sleator-Weinfurter construction: V ² =U," <i>Phil Trans. R. Soc. Lond. A</i> : 9-18.
	C16	DiVincenzo, D. (1997) "Quantum Gates and Circuits," <i>Phil Trans. R. Soc. Lond. A.</i> , Submitted
<i>↓</i>	C17	DiVincenzo, D. (1998) "Real and realistic quantum computers," <i>Nature</i> 393: 113-114.
<i>↓</i>	C18	Dowling et al. (date unknown) "Electron-Nuclear Double-Resonance Quantum Computer" <i>Phil Trans. R. Soc. Lond. A.</i> <i>1/20 DATE</i>
<i>DH</i>	C19	Follstaedt et al. (2000) "Protein Adhesion on SAM Coated Semiconductor Wafers: Hydrophobic Versus Hydrophilic Surfaces," Sandia Report SAND_2000-3016
	C20	Gad, H. et al. (2000) "Fission and uncoating of synaptic clathrin-coated vesicles are perturbed by disruption of interactions with the SH3 domain of endophilin," <i>Nature</i> 27:301-312 (Abstract only) <i>1/20/00</i>
	C21	Gad, H. (2000) "Synaptic vesicle endocytosis studied in a living synapse," (Ph.D. Thesis) Karolinska Institute. (conclusions drawn from Ph.D. thesis)
<i>↓</i>	C22	Gershenfeld et al. (1998) "Quantum Computing with Molecules," <i>Scientific American</i> . June 1998 (www.media.mit.edu/physics/publications/papers/98.06.sciam/0698gershenfeld.html)

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<i>22a</i>	C23	Gisin, N. (October 24, 2002) "NOT logic," <i>Nature</i> 419: 797-798.	
<i>22a</i>	C24	Greene et al. (2000) "Complete Reconstitution of Clathrin Basket Formation with Recombinant Protein Fragments: Adaptor Control of Clathrin Self-Assembly," <i>Traffic</i> 1: 69-75.	
	C25	Hameroff, S. (date unknown) "What is Consciousness," www.consciousness.arizona.edu/hameroff/slide%20show/slideshow_6.htm	NO DATE
	C26	Hameroff, S. (date unknown) "Quantum computation in brain microtubules? The Penrose-Hameroff "Orch OR" model of consciousness," www.consciousness.arizona.edu/hameroff/Pen-Ham/Orch_OR/Royal%20Society.htm	NO DATE
<i>22a</i>	C27	Hameroff et al (1998) "Quantum Theory and Human Consciousness," 47-62	
<i>22a</i>	C28	Hardy et al. (2000) "Universal Manipulation of a Single Qubit," Centre for Quantum Computation, Clarendon Laboratory, Department of Physics, University of Oxford.	
<i>22a</i>	C29	Harneit et al. (date unknown) "N@C ₆₀ for Quantum Computing" ...	NO DATE
<i>22a</i>	C30	Harneit et al. (July 20, 2002) "Architectures for a Spin Quantum Computer Based on Endohedral Fullerenes," <i>Phys. Stat. Sol.</i> 233: 453-461.	
<i>22a</i>	C31	Haucke V., "Molecular Mechanisms of Endocytosis," INABIS '98	
	C32	Henderson et al. (date unknown) "CQC Introductions: Quantum Entanglement," www.qubit.org/library/intros/entang/index.html	
<i>22a</i>	C33	Hubbell et al. (1998) "Recent advances in site-directed spin labeling of proteins," <i>Current Opinion in Structural Biology</i> 8: 649-656	
	C34	Jaksch et al. (date unknown) "Review of quantum computer implementations with quantum optical systems," Institute for Theoretical Physics, Innsbruck (PowerPoint Presentation)	NO DATE
<i>22a</i>	C35	Kanaseki et al. (1969) "The Vesicle in a Basket: A Morphological Study of the Coated Vesicle Isolated from the Nerve Endings of the Guinea Pig Brain, with Special Reference to the Mechanism of Membrane Movements," <i>Journal of Cell Biology</i> 42: 202-220.	
	C36	Keen, description of Keen laboratory research	NO DATE
<i>22a</i>	C37	Kirchhausen, T. et al. (1997) "Linking cargo to vesicle formation: receptor tail interactions with coat proteins," <i>Current Opinion in Cell Biology</i> 9: 488-495	
	C38	Koruga, D. (date unknown) "From Natural to Artificial Molecular Machines," (Abstract 6 th Foresight from the Conference on Molecular Monotechnology) www.foresight.org/Conferences/MNT6/Abstracts/Koruga/	NO DATE
<i>22a</i>	C39	Laflamme et al. (August 22, 2002) "NMR GHZ" (www.arxiv.org)	
<i>22a</i>	C40	Leuenberger et al. (2001) "Quantum computing in molecular magnets," Department of Physics and Astronomy, University of Basel, Switzerland.	
<i>22a</i>	C41	Liu et al. (1995) "Regulation of Clathrin Assembly and Trimerization Defined Using Recombinant Triskelion Hubs," <i>Cell</i> 83: 257-267	

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	C43	Loss, D. (date unknown) "Spin-based Quantum Information Processing in Nanostructures," Department of Physics, University of Basel, Switzerland - (PowerPoint Presentation)
<i>TM</i>	C44	Mekis, A. et al. (1995) "Ray chaos and Q-spoiling in Lasing Droplets," <i>Phys. Rev. Lett.</i> 75: 2682-2686
	C45	Mullins, J. (2001) "The Topsy Turvey World of Quantum Computing," <i>IEEE Spectrum</i> : 42-49.
<i>TM</i>	C46	Myers, T. (date unknown) "From NANDS to Neurons: A Look at Alternative Approaches to Information Processing," www.cs.wayne.edu/~tom/csc888/csc888.html
	C47	Nöckel, J. U. et al. (1996) "Chaotic Light: A Theory of Asymmetric Resonant Cavities," <i>Optical Processes in Microactivities</i> , World Scientific Publishers, 1996
<i>TM</i>	C48	Nöckel, J. U. et al. (1994) "Q-spoiling and Directionality in Deformed Ring Cavities," <i>Optics Letters</i> 19: 1693-1695
	C49	Oskin et al. (January 2002) "A Practical Architecture for Reliable Quantum Computers," <i>Computer</i> : 79-87.
<i>TM</i>	C50	Owen, D.J. (2000) "The structure and function of the β 2-adaptin appendage domain," <i>EMBO Journal</i> 19: 4216-4227
	C51	Pan et al. (date unknown) "A Precision Technology for Controlling Protein Adsorption and Cell Adhesion in Biomems," (manuscript)
<i>TM</i>	C52	Preskill, J. (1997) "Reliable Quantum Computers," (manuscript) California Institute of Technology. (www.arxiv.org)
	C53	Redfern, C. (1999) "Conditional expression and signaling of a specifically designed Gi-coupled receptor in transgenic mice," <i>Nature Biotechnology</i> 17: 165-169
	C54	Recher et al. (2000) "Quantum Dot as Spin Filter and Spin Memory," <i>Physical Review Letters</i> : 85 1962-1965.
	C55	Rieffel et al. (2000) "An Introduction to Quantum Computing for Non-Physicists," <i>ACM Computing Surveys</i> 32: 300-335.
	C56	Scearce-Levie et al. (2001) "Engineering receptors activated solely by synthetic ligands (RASSLs)," <i>Trends in Pharmacological Sciences</i> 22: 414-420
	C57	Shih, W. et al. (1995) "A Clathrin-binding Site in the Hinge of the β 2 Chain of Mammalian AP-2 Complexes, <i>The Journal of Biological Chemistry</i> 270: 31083-31090.
	C58	Smith, T. (date unknown) "Why do I like Clifford Algebras?," www.innerx.net/personal/tsmith/clifpg.html
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<i>WZ</i>	C60	Steane, A. (1996) "Quantum Error Correction," www.qubit.org/library/intros/QEC.html
	C61	Steane, A. (1997) "Quantum Computing," Department of Atomic and Laser Physics, University of Oxford, Clarendon Laboratory: 1-65.
	C62	Steane, A. (1998) "Quantum Computing," <i>Reports on Progress in Physics</i> 61: 117-173
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	C64	Takei et al. (1998) "Generation of Coated Intermediates of Clathrin-Mediated Endocytosis on Protein-Free Liposomes," <i>Cell</i> 94: 131-141
<i>↓</i>	C65	Twamley, J. (October 30, 2002) "Quantum cellular automata quantum computing with endohedral fullerenes," (manuscript) (www.arxiv.org)
<i>↓</i>	C66	Van Koppen, C. J. (date unknown) "Multiple pathways for the dynamin-regulated internalization of muscarinic acetylcholine receptors" (Abstract) <i>NO DATE</i>
<i>RW</i>	C67	Vitalicano, F. (2001) "The Next Big Thing That Will Change Absolutely Everything," www.vxm.com/Speed.quantum.html
	C68	Vitalicano, F. (June 18, 2002) "VXMaia: A New Quantum Computing System," (PowerPoint Presentation)
	C69	Vitalicano, F. (October 23, 2002) "VXMaia: A New Quantum Computing System for Biotech," (PowerPoint Presentation)
	C70	Vitalicano, F. (February 2003) "VXMaia: A New Quantum Computing Platform" (PowerPoint Presentation)
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	C75	Vrijen et al. (1999) "Electron Spin Resonance Transistors for Quantum Computing in Silicon-Germanium Hetero-structures," (manuscript) (www.arxiv.org)
	C76	Ybe et al. (1998) "Clathrin self-assembly is regulated by three light-chain residues controlling the formation of critical salt bridges," <i>The EMBO Journal</i> 17: 1297-1303.
<i>↓</i>	C77	Ybe et al. (1999) "Clathrin Structure Reveals Motifs for Self Assembly," www.als.lbl.gov/als/science/sci_archive/clathrin.html
	C78	Ybe et al. (date unknown) "Crystal structure of a repeating superhelix motif in the clathrin triskelion leg," <i>NO DATE</i>
<i>BR</i>	C79	Ybe et al. (2000) "Molecular Structures of Proteins Involved in Vesicle Fusion," <i>Traffic</i> 1: 474-479.
	C80	"Adaptin B", (date unknown) Catalog number A35620. Transduction Laboratories, 133 Venture Court, Lexington, KY 40511-2624 <i>NO DATE</i>

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	C81	"Basic EPR Theory" (date unknown) <i>no DATE</i>
	C82	Centre for Quantum Computation, www.qubit.org (date unknown) <i>no DATE</i>
	C83	"Continuous Wave ENDOR," (date unknown) <i>no DATE</i>
<i>W</i>	C84	"Electron Spin Resonance (ESR)," (2000) Physics 77, Experiment 6
	C85	"EPR Continuous Wave Practice Page," www.bruker-biospin.com/brukerepr/continuouswavepractice.html (date unknown) <i>no DATE</i>
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	C87	"Introduction to Mass Spectrometry," masspec.scripps.edu/information/intro/chapter3.html (date unknown) <i>no DATE</i>
<i>W</i>	C88	"pET-15b Vector," (1998), Novagen Catalog
<i>W</i>	C89	"pET-23a-d(+) Vectors," (1998), Novagen Catalog
	C90	"QIAexpress - The Complete System." Qiagen Catalog www.qiagen.com/catalog/auto/cget.asp?p=QIAexpress_complete_system (date unknown) <i>no DATE</i>
	C91	"Quantum Entanglement: Recent Developments in Teleportation/Entanglement," www.cakes.mcmail.com/StarTrek/teleportation.htm (date unknown) <i>no DATE</i>
	C92	"Receptor-Mediated Endocytosis," www.erin.utoronto.ca/~w9bio315/RME.htm (date unknown) <i>no DATE</i>
	C93	"Simple quantum gates," www.qubit.org/library/intros/comp/inset2.html (date unknown) <i>no DATE</i>
	C94	"Universal gates," http://planck.thphys.may.ie/jtwamley/thesis/Hovland/thesis/node17.shtml (date unknown) <i>no DATE</i>
	C95	Harneit, W. (2001) "A fullerene-based electron spin quantum computer," (manuscript)
EXAMINER	<i>Ksall 3</i>	
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